

Description of a New Species of the Genus *Lipromorpha*  
(Coleoptera, Chrysomelidae, Alticinae) from  
Okinoerabu-jima Island, Southwest Japan

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**Abstract** A new species, *Lipromorpha inexpectata* is described on the basis of the specimens collected from Okinoerabu-jima Island of Kagoshima Prefecture, Southwest Japan. Key to the Japanese species of the genus *Lipromorpha* is modified by adding the present new species.

In the previous revision (KOMIYA, 2006), two members of the genus *Lipromorpha* CHÛJÔ et KIMOTO, 1960 were recorded from the southwestern islands of Japan. One was *L. loochooana* CHÛJÔ, 1961 from Amami-Ôshima, Tokuno-shima and Okinawa Islands, Kagoshima and Okinawa Prefectures, the other *L. sakishimana* Y. KOMIYA, 2006 from Miyako-jima, Ishigaki-jima and Taketomi-jima Islands, Okinawa Prefecture. The third species was found in Okinoerabu-jima Island of Kagoshima Prefecture by my recent field survey, and is described as a new species in the present paper. Key to the Japanese species of the genus by my previous revision (KOMIYA, 2006), is modified by adding the present new species.

*Lipromorpha inexpectata* sp. nov.

(Figs. 1 & 2)

**Male.** Body elongate, blackish brown, with mouth-part, clypeus, frons, basal five segments of antennae, basal halves of elytra, proximal portions of femora, tibiae and tarsi light brown.

Head slightly narrower than the apical width of prothorax; clypeus trigonal, delimited from labrum with shallow transverse depression, low ridges at lateral portions, finely granulate on surface; inter-antennal area narrow, with a deep longitudinal sulcus continuing to a shallow longitudinal depression on vertex; frontal tubercles oblong, contiguous; vertex finely granulate, scattered with large hair-bearing punctures on lateral and posterior portions.

Antennae slender, about 7/8 times as long as body; first segment the longest, club-shaped, second and third each about a half in length to first, second a little thicker than third, fourth slightly longer than third, following three segments each a little longer than fourth, almost equal in length to each other, seventh slightly thicker than sixth,

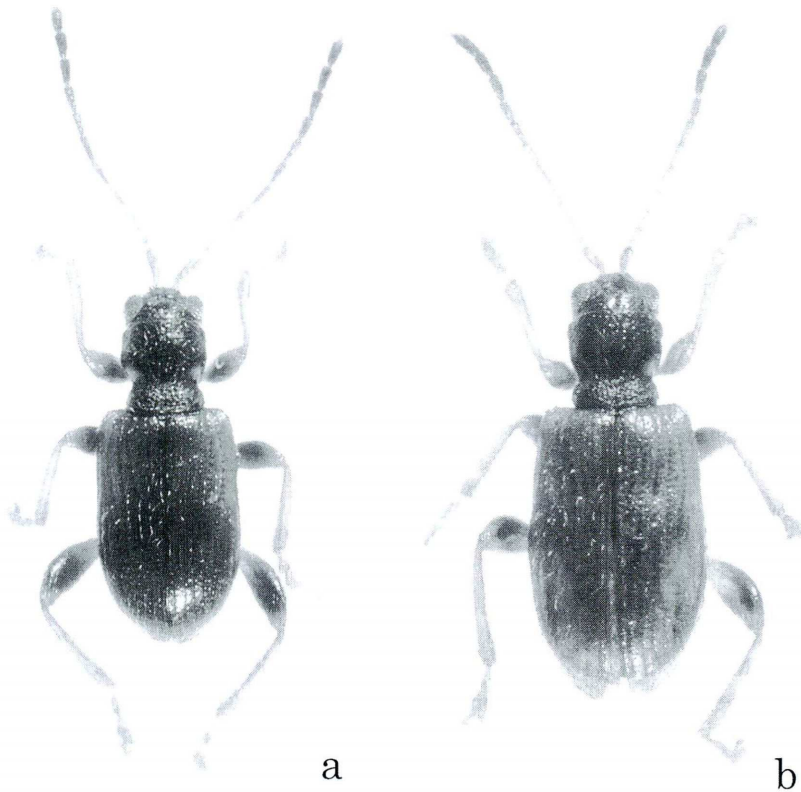


Fig. 1. *Lipomorpha inexpectata* sp. nov.; a, holotype male; b, paratype female.

from eighth to tenth clearly thicker than seventh, subequal in length and thickness to each other, eleventh  $1 + 1/2$  times longer than the preceding segment, with pointed apex; each segment furnished with long erect brownish hairs.

Pronotum very slightly longer than wide (pronotal ratio = pronotal breadth/length: 0.96), widest at anterior angles, with strong constrictions behind middle (constriction ratio = maximal pronotal breadth/minimal breadth: 1.29), and with another weak constriction just behind anterior corners; surface distinctly shagreened throughout, scattered with hair-bearing punctures, with a bisinuate depression behind middle, which continues to strong constrictions at sides.

Scutellum triangular, finely granulate on surface, with several hairs along posterior margin.

Elytra elongate and parallel-sided, with prominent humeral calli; surface convex, with a wide and shallow transverse depression near basal third; surface covered with regular rows of punctures, scutellar row present, the fifth row bifurcating at transverse

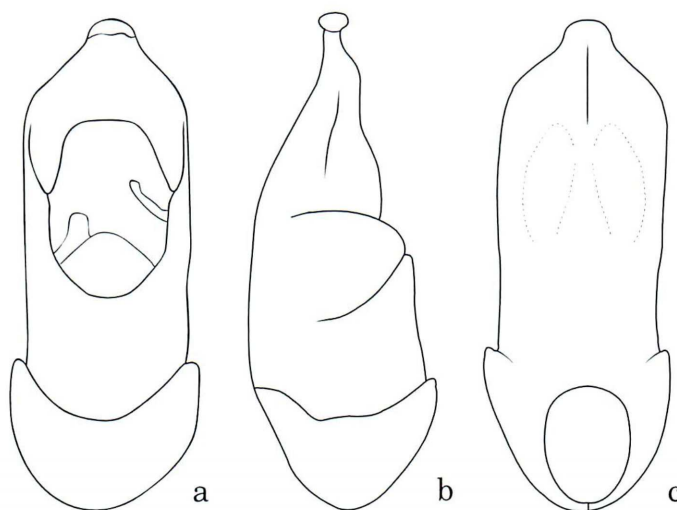


Fig. 2. Male genitalia of *Lipromorpha inexpectata* sp. nov.: a, dorsal view; b, lateral view; c, ventral view.

depression, anterior portion of the sixth absent, appearing at about bifurcating point of the fifth, from the seventh to the eleventh running on the vertical plane of elytra; interstices shining but minutely punctured, with a row of erect hairs.

Underside shining, with weak transverse corrugations, scattered with long hairs; last visible abdominal sternite trilobed, central lobe with triangular depression at middle on posterior part, apex broadly truncate.

Legs slender, with femora slightly incrassate.

Male genitalia (Fig. 2) straight, ventral side evenly convex in lateral view, with apex sharply bent dorsad.

**Female.** Body blackish brown, with underside of head including mouth-part, clypeus, frons, antennae except for apical three segments, elytra and legs totally light brown. Antennae distinctly shorter than male, about 3/4 times as long as body. Last visible abdominal sternite entire on apex.

Body length: male,  $2.14 \pm 0.08$  (n=26) mm, female,  $2.35 \pm 0.14$  (n=14) mm.

Body breadth: male,  $0.87 \pm 0.04$  (n=26) mm, female,  $0.99 \pm 0.06$  (n=14) mm.

Pronotal ratio: male,  $0.97 \pm 0.03$  (n=26), female,  $1.00 \pm 0.03$  (n=14).

Constriction ratio: male,  $1.34 \pm 0.05$  (n=26), female,  $1.37 \pm 0.03$  (n=14).

**Holotype:** ♂, Okinoerabu-jima Is., Tamina Misaki, China-chô, Ôshima-gun, Kagoshima Pref., SW. Japan, 16-IV-2006, Y. KOMIYA leg.

**Paratypes:** 24♂♂, 14♀♀, the same data as the holotype; 1♂, the same locality as the holotype, 11-IV-2006, Y. KOMIYA leg.

The type series is tentatively housed in the author's collection, but will be deposited in the most appropriate institution together with the whole collection of the author.

**Distribution.** Okinoerabu-jima Is., Ryukyu Archipelago, SW. Japan.



*Adult food plant.* *Ampelopsis heterophylla* SIEB. et ZUCC. and *Vitis thunbergii* SIEB. et ZUCC. (Vitaceae)

### Key to the Japanese Species of the Genus *Lipromorpha*

1. Anterior coxal cavity open behind. Pronotum distinctly wider than long, with weak constriction behind middle. ....(Genus *Pseudoliprus* CHÛJÔ et KIMOTO, 1960)
- Anterior coxal cavity closed behind. Pronotum as long as wide, or slightly longer than wide, with strong constriction behind middle.....2  
.....(Genus *Lipromorpha* CHÛJÔ et KIMOTO, 1960).....2
2. Upper surface and underside totally light yellowish brown in male, abdominal sternite in female slightly darker. Male genitalia almost subcylindrical, with ventral surface straight in lateral view, terminal process triangular and broadly truncate at apex; Ryukyu Archipelago: Miyako-jima Is., Ishigaki-jima Is. & Taketomi-jima Is. .... *L. sakishimana* Y. KOMIYA, 2006
- Upper surface variable in colour, from totally reddish brown to totally pitchy brown. Underside at least partly pitchy brown. ....3
3. Inter-antennal longitudinal sulcus continuing to shallow but distinct narrow longitudinal depression at vertex. Upper surface always bicolorous, blackish and light reddish brown. Male genitalia straight, ventral side evenly convex in lateral view, with apex sharply bent dorsad; Ryukyu Archipelago: Okinoerabu-jima Is. ....  
..... *L. inexpectata* sp. nov.
- Vertex evenly convex. Frons with a large depression at centre, inter-antennal longitudinal sulcus bifurcating at frontal depression into Y-shaped sulcus which delimits posterior end of frontal tubercles. Upper surface totally pitchy, or reddish brown, though rarely bicolorous. Male genitalia uniformly arcuate dorsad in lateral view, with terminal process short and evenly rounded at apex; Ryukyu Archipelago: Amami-Ôshima Is., Tokuno-shima Is. & Okinawa Is. ....  
..... *L. loochooana* CHÛJÔ, 1961

### 要 約

小宮義璋：沖永良部島産のリウキュウクビボソトビハムシ属の1新種。—— 鹿児島県沖永良部島でえられたリウキュウクビボソトビハムシ属 *Lipromorpha* (ハムシ科トビハムシ亜科) の1種を、オキノエラブクビボソトビハムシ *L. inexpectata* sp. nov. (新種新称) として記載した。また前報で作成した日本産 *Lipromorpha* 属の検索表に本新種を加えて改訂した。

### Reference

- KOMIYA, Y., 2006. Studies on the genus *Lipromorpha* (Alticinae, Chrysomelidae, Coleoptera) in Japan, with description of a new species. *Elytra, Tokyo*, **34**: 199–205.